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ABSTRACT

College students were compared to adults for their reading comprehension of news items on two critical issues of national concern. The subjects were 109 adults and 97 college students who read ten short magazine articles on the Iran-United States hostage crisis and the U.S. energy problem. After reading the articles, the subjects' comprehension skills were tested with questions about main ideas, correct details, inferences, and conclusions/judgements. The mean and median scores of adults were significantly higher than those of the students. There were no significant differences between males and females. When questions were analyzed by type, there was little variation among adults but great variation among students. In general, students were able to answer questions concerning the Iranian crisis better than those about the energy crisis. Students could answer stated main idea questions, but not implied main ideas: and if one of the response foils was a direct statement from the text, students were more likely to select that response. Inference and generalization questions were all poorly answered. Students clearly needed more direct instruction in answering questions of an inferential nature. (RL)

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COMPREHENSION OF CRITICAL NEWS ITEMS AS EXPRESSED BY COLLEGE STUDENTS AND ADULTS IN BUSINESS, INDUSTRY, AND RELIGION

Researchers have concerned themselves with matters of comprehension and reading interests of individuals and groups of every age and level of education for more than a century. The results of various studies led Fisher (1962) and Smith (1964) to conclude that education seems to exert an important influence on readership. Russell (1960) goes a step further to project that the amount of a person's reading is determined partly by his education and partly by the class of people to which he belongs. In other words, educational status and socioeconomic status are closely related to one another and to the amount and kind of reading done. This notion is widespread in American society today, regarding books, magazines, and newspaper selection.

Certain magazine editors have long climed audiences consisting of a class market. For example, Fortune, Harpers, and Business World have boasted of executives among their greatest clients; while the nature of articles in Vogue, Esquire, Playboy, and Reader's Digest also requires at least a high school level of comprehension, if one is to read and enjoy them. Dulin (1969) researched the readability levels of adult magazines measured by four prevailing Formulas and found that the reading difficulty of many of the popular ones earlier reported by Allias (1957) as

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having relatively low-difficulty levels had changed considerably. Among magazines on the Dulin list with college level reading difficulties were: Reader's Digest, T.V. Guide, Esquire, Life, Ladies Home Journal, and Good Housekeeping; while upper high school levels showed McCall's, Redbook, and Post; and at the lower high school grades was Sports Illustrated. Dulin attributed the increase in difficulty to two factors: (1) articles of near-scholarly interest are now appearing in them, and (2) general reading levels have risen over the years.

In reemphasizing the values of reading to society, Dallman (1978) and her associates expressed the view that people who cannot read critically may be easily manipulated by the unprincipled who may solicit their time, attention, or votes. Further, they may not be able to contribute to their country through intelligent participation in decision making, and in action necessary for the security of their state and nation. In our technological age, people in business, industry, and the professions who find themselves unable to cope with the vast amount of reading materials which must be covered and understood within restricted time limits are decidedly handicapped.

Only a few weeks ago, Dieter (1980) pointed out that higher education is undergoing what may be the most significant internal change in half a century. "Professional fields such as engineering and business," he said, "are becoming more important to this nation's economic growth and quality of life . . . Better

engineering is becoming increasingly critical for the survival of America's standard of living . . . . Declining natural resources, over-population in third world countries, poor health and malnutrition, and potential world conflicts are problems that are not going to go away." (p. 56). The impact of this big shift in students' majors in colleges and society, and other problems we face today bring clearly into focus two important implications: (1) Business, industry, and other community organizations should provide courses, materials, motivation, opportunities, and incentives for their employees and other adults to keep abreast, via reading, of critical issues facing the country, and (2) Colleges should provide more help to students enrolled in courses designed to prepare them for greater usefulness to the country.

While studies have shown both college students and out-of-school adults to be interested in reading fiction and light poetry for relaxation, others have shown both groups to be caught up in the literature which reflects the signs of the times. For example, in Fagin's study (1929), students at Johns Hopkins were polled to ascertain their favorite periodicals. The results showed preferences in current events, problems, and conditions that determine the pattern of their existence. Two decades later, Weingarten (1949) studied the reading preferences of over 500 veterans in a Chicago junior college to find that many of the 224 magazine choices were related to vocational and avocational interests with 189 in scientific and 70 in businesses. Their overall preferences indicated a strong interest in the realities

of life--issues of a post-war world and the problems of individual adjustment. Near the end of the next two decades, Adams (1969) studied the reading preferences of students in far-away Lebanon, only to find that, having been recently uprooted from their homeland, they were reading political history and biographies of men or revolutionary stature in the hopes of finding survival techniques.

From among the many concerns facing our country today, the researchers chose two for this study: The U.S. and Iran - The Hostage Crisis and The U.S. Energy Problem. These two concerns affect the lives of all Americans without regard to race or sex, and are explored in depth in current magazines. Are our college students and our out-of-school adults[1] going beyond the mere listening to fleeting and often controversial news bits on these two national concerns to read and digest for themselves information that may be helpful in decision making and in intelligent and unbiased discussion of them? The best way to ascertain the answer to this question is to ask them directly.

The problem of this study, then, was to determine the extent of the reading comprehension of college students and adults on two critical issues of national concern; namely, "The U.S. and Iran: The Hostage Crisis," and "The U.S. Energy Problem."

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[1]Referred to as adults

Method and Procedures

In the absence of a standardized instrument to measure the comprehension of college students and adults on two national issues (The U.S. and Iran: The Hostage Crisis, and The U.S. Energy Problem), members of the East Texas Educators Research Council devised an informal questionnaire with which to do so. Hypotheses proposed were as follows:

1. When presented with a set of test questions subsequent to having read a brief related article, the mean total comprehension score of adults will equal or exceed the mean total comprehension score of college students.

2. When presented with a set of test questions subsequent to having read a brief related article, the mean comprehension score of males will equal or exceed the mean comprehension score for females.

Content of the articles used in the test instrument was taken from issues of U.S. News and World Report, Newsweek, and Reader's Digest, 1979-80. Each of the ten articles contained from 120 to 150 words, and was followed by four multiple choice questions and one open-ended question. Comprehension skills tested for included: (1) Main Idea; (2) Correct Details; (3) Inferences, and (4) Conclusions or Judgments. Participants were instructed to read each article carefully, and to answer the first four questions by placing an "X" in the box opposite the best answer. Additionally, they were told to complete every fifth item by adding words or

phrases to present a reasonable judgment or conclusion.

To prevent the adverse effect of the time variable, participants were instructed to take as much time as needed for completion of the questionnaires. Carlson (1949) and Rankin (1962) reported studies which found that the imposition of time limits which do not permit slow readers to finish answering questions, obviously favor the faster readers on the comprehension scores. Concurring in this notion, Webb (1966) suggests that the time element, together with such other factors as lack of familiarity with tests, with the materials, and the novelty of a test-taking role, tend to depress responses and may be selectively biasing for participants of different educational levels.

Comprehension was measured as the number of correct responses on each of the comprehension skills and the total.

Findings and Discussion

One hundred seventy-five questionnaires were presented to out-of-school adults for completion, and of this number one hundred and nine (109) were returned in usable condition. This represents a return of 62.00 percent. The college students were presented 97 questionnaires, and all were returned in usable condition, representing 100.00 percent (see Table 1 on the following page).

Table 1
Sample Size, Total Number of Questionnaires Presented and Total Number of Usable Questionnaires Returned by Adults and College Students

Participants	Sample Size	Number Presented	Number of Usable Questionnaires Returned	
			No.	*Percent*
Adults	109	175	109	62.00
College Students	97		97	100.00
TOTAL				81.00

Of the total number of questionnaires presented to out-of-school adults, 150 were mailed and 25 were delivered directly to managers in business, industrial, and religious organizations for use by their salaried personnel. College students were administered the questionnaire during a regular class session. Table 2 presents the number of usable returned questionnaires of organizations by sex. The highest number of participants among males were from industry with 28 or 62.00 percent of the total of 45. Next highest among males participating were from religious groups with 20 or 69.00 percent of a total of 29. Males from business participating were lowest with a total of 17 or 49.00 percent of a total of 35.

Table 2 can be found on the following page.

Table 2
Sample Size and Total Number of Adults' Usable Questionnaires Returned by Organization and Sex

Organization	Sex					
	Number			Percent		
	M	F	Total	M	F	Total
Business	17	18	35	49.00	51.00	100.00
Industry	28	17	45	62.00	38.00	100.00
Religion	20	9	29	69.00	31.00	100.00
TOTAL	65	44	109	60.00	40.00	100.00

The highest number of females returning usable questionnaires were from Business for a total of 18 or 51.00 percent of 35. Next highest were participants from Industry with a total of 17 or 38.00 percent of 45 in that group. Only nine females returned usable questionnaires from Religious organizations. Five of the 25 persons who accepted hand-delivered questionnaires were visited at least three times to retrieve them. Each time the persons either stated that they forgot them, or they did not have time to complete them, while at least two dozen of those who received mailed questionnaires telephoned to say that they were still working on them and would mail them in, even beyond the deadline given them.

Results

Hypothesis I. The scores for the 109 adults ranged from 90 to 54, with a mean of 75.9 and a median score of 76, while for the 97 students the range was from 64-26, with a mean of 46-28

and a median of 48. This difference was significant at the .01 level.

Hypothesis II. The scores for the 65 adult males ranged from 90-62, with a mean of 74.89. The scores for the 46 college males ranged from 64-32 with a mean of 48. This difference was significant at the .01 level.

The scores for the 44 adult women ranged from 84-54, with a mean of 72.63. The scores for the 51 college females ranged from 60-26 with a mean of 44.12. This difference was significant at the .01 level.

There were no significant differences between adult males and adult females or college males and females comprehension scores. When questions were analyzed by type, there was little variation among adults. For students, however, there was great variation. In general, students were able to answer questions concerning the Iranian crisis better than the energy crisis. They could answer stated main idea questions, but not implied main ideas, and if one of the response foils was a direct statement from the text, that response was more likely to be selected whether it answered the question or not. Inference and generalization questions were all poorly answered.

Conclusion

Adults indeed read and understand news-type items better than students. This may be due to several factors: (1) educational level; (2) level of interest, and (3) prior knowledge which may have contributed to the proper response selection.

Two additional rather interesting findings were observed: (1) the lack of sex differences in comprehension skills at either level, and (2) the role that interest or awareness plays on the ability to comprehend. A major implication for reading programs at the post-secondary level is that students clearly need more direct instruction in answering questions of an inferential nature. Further research is needed on methods which best facilitate this type of skill.

Table 3

COMPREHENSION SCORES OF ADULTS AND STUDENTS BY SEX

ADULTS			STUDENTS		
Scores	*(f) Males*	*(f) Females*	*Scores*	*(f) Males*	*(f) Females*
90	1	0			
88	3	0			
84	4	1			
82	7	1			
80	6	6			
78	7	8			
76	10	6			
74	8	2			
72	12	7			
70	2	2			
66	3	2			
64	0	3	64	1	0
62	2	3	62	0	0
60	0	0	60	1	1
58	0	0	58	4	0
57	0	2	57	0	0
56	0	0	56	2	4
54	0	1	54	5	3
			52	4	6
			50	8	4
			48	2	5
			46	1	2
			44	4	4
			42	4	4
			40	4	3
			38	3	3
			36	1	4
			34	1	1
			32	1	3
			30	0	1
			26	0	3

Table 4

COMPREHENSION SCORES OF ADULT RESPONDENTS BY EDUCATIONAL LEVEL AND SEX

HIGH SCHOOL		BUSINESS SCHOOL		2 YRS COLLEGE		COLLEGE DEGREE		M.A. DEGREE	
Scores									
Males	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*
78-3	56-1	74-3	72-3	80-2	66-2	88-1	84-1	90-1	
76-1	54-1	72-4	64-1	76-5	64-2	84-4	82-1	88-2	
72-4			62-1	74-5	62-2	82-7	80-6		
70-2			56-1			80-4	78-8		
66-3						78-4	76-6		
62-2						76-4	74-2		
						74-0	72-4		
						72-4	70-2		

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